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ABSTRACT

Presented is an analysis of nine agreements focused on three areas of common concern to dissemination specialists involved in the 1977 National Dissemination Forum: resources, linkage, research, evaluation and quality control. FORUM participants represented the Education Resources Information Center (ERIC of the National Institute of Education (NIE), the National Diffusion Network (NDN) of the U.S. Office of Education, the Research and Development Exchange (RDX) of NIE, the Research and Development Utilization Program (RDU) of NIE, and the State Education Agencies-National Dissemination Leadership Project (SEA/NDLP) of NIE. An appendix to the document contains the report of the Resources group.

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Jerry Fletcher

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

FINAL REPORT
OF THE
1977 NATIONAL DISSEMINATION FORUM

Sponsored by:

Department of Health, Education, and Welfare

- Office of the Assistant Secretary for Education
- U.S. Office of Education
- National Institute of Education

Prepared for:

The Steering Committee of the 1978 National Dissemination Forum

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CONDUCT OF THE 1977 FORUM

Origin of the FORUM

Two reports separated by exactly a year--one published in January, 1976, and the other in January, 1977--led to the FORUM:

- IPOD Report--NIE's Interstate Project on Dissemination published its Report and Recommendations in January, 1976.

- DAG Report--The Dissemination Analysis Group completed its Final Report to the Dissemination Policy Council of the DHEW Education Division in January, 1977.

IPOD brought together dissemination specialists from SEAs in Kentucky, Montana, New Jersey, North Carolina, Oregon, Rhode Island, and Texas to study problems in the dissemination of educational products, practices, and information and to recommend policy action.

IPOD found:

- Ambiguous definitions, confusing terminology, and relentless jargon prevent productive discussion about dissemination.

- Federal law and regulations contain 208 scattered requirements and name 54 officials, managing to miss many programs and officials that should be included and failing to establish a coherent plan or mechanism for Federal dissemination activities.

- SEAs are the route for disseminating products, practices, and information to LEAs.

IPOD recommended:

1. That the educational community adopt a consistent statement relative to dissemination activities and possibilities for expanding their scope.

2. That state education agencies recognize dissemination as a major function and move toward development of a coordinated, integrated system within each agency.

3. That roles and responsibilities of organizational units under the Assistant Secretary for Education be clearly delineated in relation to dissemination.

4. That a plan for a nationwide system for sharing educational knowledge be developed and implemented.

5. That adequate resources be allocated for dissemination activities at both the state and Federal levels and that legislation encourage development of an agencywide dissemination function at all levels.

6. That NIE and USOE, in coordination with the Dissemination Leadership Project, provide for identification or development of technical assistance and for access to such assistance by states as they develop dissemination capabilities.

7. That programs of inservice and preservice training be developed and funded.

8. That dissemination activities be regularly re-evaluated in light of the state-of-the-art and recommendations for improvement be made.

The DAG report titled Dissemination in Relation to Elementary and Secondary Education (January 1, 1977) was the work of 12 dissemination specialists from inside and outside the Federal government. The report was commissioned by the Dissemination Policy Council of the Education Division of HEW to formulate recommendations which might be forwarded to the Assistant Secretary for Education to shape dissemination policy for the Education Division of HEW (which consists of USOE and NIE).

After a year-long study, in which it reviewed recent documents on dissemination and sought ideas through a questionnaire sent to over 200 individuals and agencies, the DAG found:

- Target groups for dissemination (particularly decision-makers) are not identified with sufficient precision.

- The content and form of much of what is disseminated is of relatively poor quality.

- The reliance on one-way and single-channel modes of dissemination is not likely to achieve high impact.

- The few mechanisms for practitioner influence and feedback to assist educational dissemination are weak and irregular.

- Few mechanisms exist for sharing among peers and among different groups of educational specialists.

- In spite of the enormous number and variety of educational programs and materials in existence, rarely are alternatives readily

available to practitioners.

- The practical blocks that impede practitioner access to the existing educational dissemination systems are great.
- The incentives for practitioners to use the existing dissemination systems are weak.

The DAG recommended seven steps to create an interrelated nationwide dissemination system:

1. Establish consistent definitions of dissemination in law and in practice.
2. Establish planning mechanisms at the Federal, national, regional, state, and sub-state levels.
3. Establish administrative mechansims at the Federal, national, regional, state, and sub-state levels.
4. Initiate widespread training programs.
5. Improve research, development, evaluation, and the collection of descriptive data.
6. Increase financial resources for dissemination and provide for flexibility of use.
7. Develop a shared nationwide vision of a comprehensive educational dissemination system.

After specifying how each of the seven steps might be achieved, the DAG turned its spotlight on the management of Federal dissemination activities and offered recommendations on planning and policy making, administrative direction and coordination, internal and external communication, legal and organizational matters, and proposing new legislation.

Among other things, the DAG recommended that the Dissemination Policy Council be made a permanent body within the Education Division of HEW and be provided with a small staff and budget so that the Council could coordinate Division-wide planning and policy.

The DAG concluded:

> The problems of dissemination are not merely technical and will not yield to a merely technical solution of reorganizing or assigning responsibilities differently. The problems are those of a lack of a vision broad enough to involve all of the various actors and agencies in a coherent whole, and the missing system elements to bring such a vision about: shortage of resources and trained personnel, lack of administrative and planning mechanisms,

inconsistent definitions of dissemination, and inadequate research, development, and evaluation.

As the vision of this report suggests, the dominant thrusts of many widely scattered efforts can be pulled together into a coherent system. It simply remains to do it.

Both the IPOD and the DAG reports found problems with certain aspects of existing dissemination arrangements:

- Resources--Too little money, time, and effort go into dissemination. The IPOD report pointed out that Federal statutes and regulations governing research and development programs often fail to mention dissemination while many that mention it fail to fund it. The DAG report said: "Insufficiencies of resources for dissemination has plagued the field for decades. . . Inability to use resources flexibly is a similar problem."

- Linkage--Existing educational programs and projects are not properly interconnected. The IPOD report complained that, for example, while most SEAs are actively trying to improve education, ". . . the coordination of these activities to insure a smooth progression from one activity to the next is a problem." And the DAG report found little fault with the separate activities of the Federal groups specializing in dissemination, but said that it was in ". . . bringing about the necessary cooperative action among the various actors that Federal efforts are weakest."

- Research, Evaluation, and Quality Control--Not enough research and evaluation on dissemination techniques take place, and better filters are needed to control the products, practices, and information flowing into dissemination systems. The IPOD report said that ". . . there is no system for educational research and development"--certainly not on dissemination techniques. The DAG report called for training so that both dissemination specialists and users would understand ". . . standards for the determination of the quality required of material to be included in a system."

These common observations would, in the months to come, influence the agenda of the FORUM.

Planning the FORUM

The IPOD and DAG activities led by various USOE and NIE officials concerned with dissemination to hold conversations in the fall of 1976 about immediate next steps in coordinating nationwide dissemination activities in education. Since the major dissemination systems financed by USOE and by NIE meet every year, would it be possible to get them together at the same place and at the same time in mid-1977 so that they could learn more about each other and build better interconnections? The Federal planners decided to invite state and local dissemination specialists to meet with them to plan a mid-1977 conference.

A Pre-Conference Planning Group consisting of Federal, state, and local specialists was convened for two days in Washington in January, 1977, to discuss and formulate specific purposes for a conference and to set an agenda. Their work during the next six months resulted in the 1977 FORUM.

Purposes of the FORUM

The planners set five purposes for the event:

- To increase collaboration and coordination among NIE and USOE contractors and grantees in the field of dissemination.
- To increase common understanding of programs.
- To consider prospects for the future of educational dissemination activities.
- To identify areas in which increased understanding is needed.
- To develop a statement of principles affecting the development of educational dissemination.

These purposes were recognizable outgrowths of the IPOD and the DAG reports and recommendations. This was quite understandable, inasmuch as state officials guided the IPOD project, and state and local officials participated actively in the DAG proceedings.

Participants in the FORUM

While the planners decided to open the FORUM to anyone interested in nationwide dissemination activities, they took especially careful steps to assure the participation of five groups. These were the five groups of dissemination specialists who operate the major dissemination systems

funded by USOE and by NIE: ERIC, NDN, RDX, RDU, and SEA/NDLP. (A brief description of each one appears on the following page.)

The DAG report makes a useful distinction between "dissemination system development activities" (Federal programs and projects specializing in dissemination per se) and "dissemination activities attached to operating programs" (Federal programs such as Head Start in which dissemination is a minor activity). ERIC, NDN. RDX, RDU, and SEA/NDLP are the first type: they are the five major dissemination system development activities sponsored by USOE and by NIE.

The reader may wonder why two major Bureaus of USOE responsible for large-scale elementary and secondary school programs--the Bureau of Education for the Handicapped and the Bureau of Occupational and Adult Education--were not major participants in the FORUM. There are several explanations. One is that both BEH and BOAE retained major responsibilities for conducting research, development, evaluation, and dissemination when many such activities were transferred from other USOE bureaus to NIE in 1972 when NIE was created. Another is that the coordination of dissemination within BEH and within BOAE is fairly advanced, largely because of the smaller and specialized student populations they serve, compared to the situation elsewhere in USOE and in NIE. Another is that the planners did not want the diversity of programs represented at the FORUM to exceed the comprehension of the participants.

Thus, instead of inviting BEH and BOAE specialized dissemination programs and projects to join deliberations throughout the entire FORUM, the planners instead invited them to set up "Learning Stations" during the second and third evenings so that participants could familiarize themselves with some of the major BEH and BOAE dissemination activities.

Similar invitations were extended to some 10 other Federal, state, and local programs. Several of those invited set up Learning Stations side-by-side with those of BEH and BOAE, thus supplementing the Learning Stations operated by the five major groups themselves (ERIC, NDN, RDX, RDU, and SEA/NDLP).

Some other organizations with which the five major groups interact from time to time were also invited to take part in selected sessions. Those included private contractors who had recently completed significant research or evaluation projects dealing with dissemination and private organizations which play an active part in educational dissemination.

Altogether, some 400 individuals from Federal, state, and local agencies--as well as public and private organizations--representing every geographic sector and virtually every state in the nation attended the FORUM.

DISSEMINATION SYSTEMS AND PROJECTS ATTENDING ENTIRE FORUM

- ERIC - NIE's Education Resources Information Center

  16 national Clearinghouses linked in a tight network collect and reproduce reports and program descriptions, index journals, analyze literature, and provide other services to users on 16 major topics which are updated as necessary. ERIC serves many of the other dissemination systems and projects, in some cases through computer terminals connected directly to the central computerized file.

- NDN - USOE's National Diffusion Network

  47 states operate projects to help schools select and adopt or adapt 88 innovations created and displayed by 88 development/ demonstration schools. Each of the 88 innovations has been verified as successful by NIE/USOE. An outgrowth of ESEA Title III, NDN has trained personnel in 5,000 schools in the past 2 years and has achieved deep-rooted installations in 1,000 of them.

- RDX - NIE's Research and Development Exchange

  7 Regional Educational Laboratories and Research and Development Centers operate 5 multi-state regional exchanges to help 33 states use past research and development results and influence future research and development efforts. 4 Labs and Centers provide referral, interpretation, training, and technical services to the exchanges.

- RDU - NIE's Research and Development Utilization Program

  7 diverse projects experiment with better ways to identify school problems and supply research-based products and practices to solve them. The purposes are to show schools how to select and install improvements and to perform research and evaluation on what they actually do so as to invent still better methods for them to use. The 7 projects promote innovations in career education and basic skills.

- SEA/NDLP - NIE has two programs for building the dissemination capacity of State Education Agencies and for coordinating state activities through the National Dissemination Leadership Project.

  28 of the 56 states and territories use NIE grants to improve the capacity of their state education departments to disseminate innovations to schools. This is capacity building.

  55 of the 56 have named a dissemination representative to the NDLP, which is operated by the Council of Chief State School Officers. The NDLP sponsors meetings, publishes reports, and arranges for SEAs to review NIE's dissemination plans.

STILL CAN'T TELL THEM APART?

Try These Two Analogies ...

IF UNCLE SAMUEL HAD A FARM.....
.....then we could say

- ERIC is a central computerized library which lets every farmer assemble his/her own Farmer's Encyclopedia in print or in microfiche.
- NDN is a giant farmer's cooperative harvesting and marketing the best of the new crops.
- RDU is a set of experiment stations studying better ways of rotating crops.
- RDX is an agricultural extension service linking experiment stations to local farmers.
- SEA/NDLP are Farmer's Institutes for improving practices of leading farmers.

IF EDUCATION WERE A BUSINESS.....
.....then we could say

- ERIC is a computerized catalog containing information about products and practices available to businesses.
- NDN is a trade association collecting and distributing successful business practices.
- RDU is a research firm examining and evaluating business practices.
- RDX is an organization of salespersons representing major manufacturers.
- SEA/NDLP is a training program for state executives.

Design of the FORUM

The FORUM had several noteworthy design features:

- Each of the five groups met in separate sessions to conduct its annual business.
- During its separate sessions, each of the five groups heard detailed descriptions of the four other groups.
- During its separate sessions, each of the five groups considered the draft Statement of Agreement.
- The five groups met in common session from Tuesday noon through Thursday noon to consider topics of interest to all.
- The common session included statements by policy leaders in DHEW, USOE, and NIE about dissemination problems and prospects as seen from their vantage points.
- The common session opened with a simulation game designed to acquaint participants with other dissemination specialists in their states and regions.
- The common session re-arranged members of the five groups to discuss cross-cutting topics of concern to all: resources; linkage; research, evaluation, and quality control. (The results of these discusssions appear later in this report.)
- Each of the five groups (and other invited organizations) operated "Learning Stations" on Tuesday evening and again on Wednesday evening to demonstrate and explain their services.
- The common session ended with an assembly of all participants to consider and to vote on the draft Statement of Agreement. (The result of this vote and analyses of the nine agreements appear later in this report.)

Schedule of the FORUM

The FORUM opened on Sunday evening, ran day and night for the full week, and closed on Friday afternoon. As explained above, it allowed the five groups to meet in separate sessions early and late in the week and in a common session in mid-week. The schedule is displayed on the following page.

SCHEDULE

June 19-24, 1977

	Morning	Noon	Afternoon	Evening
Sunday				NDLP NDN
Monday	ERIC NDN RDX RDU SEA/NDLP	ERIC NDN RDX RDU SEA/NDLP	ERIC NDN RDX RDU SEA/NDLP	OPEN
Tuesday	ERIC NDN RDX RDU SEA/NDLP	NIE/USOE STATEMENTS ON DISSEMINATION	DISSEMINATION SIMULATION	LEARNING STATIONS
Wednesday	RESOURCES; LINKAGE; RESEARCH, EVALUATION, AND QUALITY CONTROL	HEW STATEMENTS ON DISSEMINATION	RESOURCES; LINKAGE; RESEARCH, EVALUATION, AND QUALITY CONTROL	LEARNING STATIONS
Thursday	STATEMENT OF AGREEMENT	FUTURE OF DISSEMINATION	ERIC NDN RDU RESEARCHERS	ERIC
Friday	ERIC NDN RDU	ERIC NDN RDU	ERIC NDN RDU	

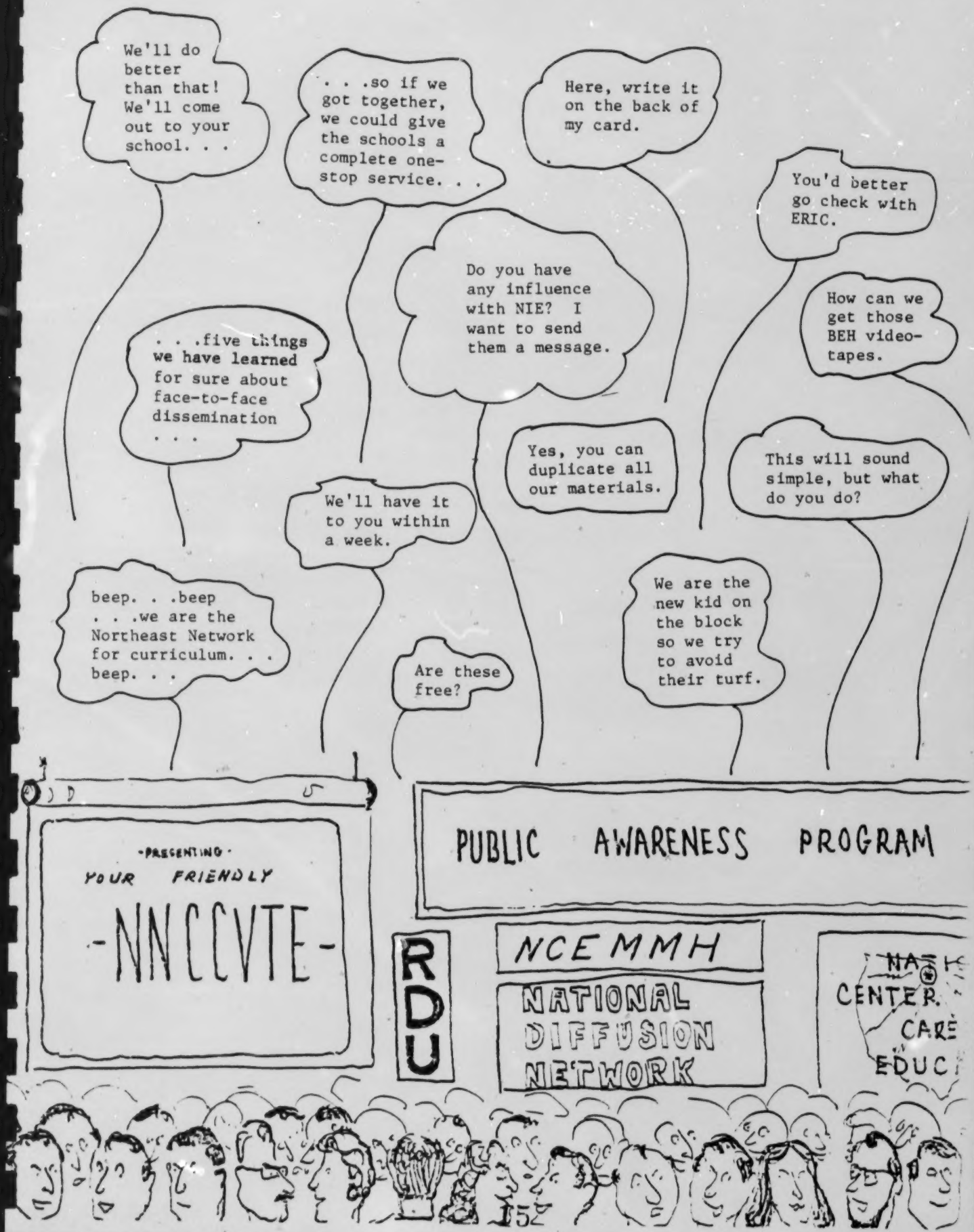
The FORUM interspersed small group and large group sessions; speeches, discussions, and demonstrations; homogeneous groupings and heterogeneous groupings; state meetings and national meetings; debate on technical matters and debate on policy matters; and chances to hear from the Federal government as well as to advise the Federal government.

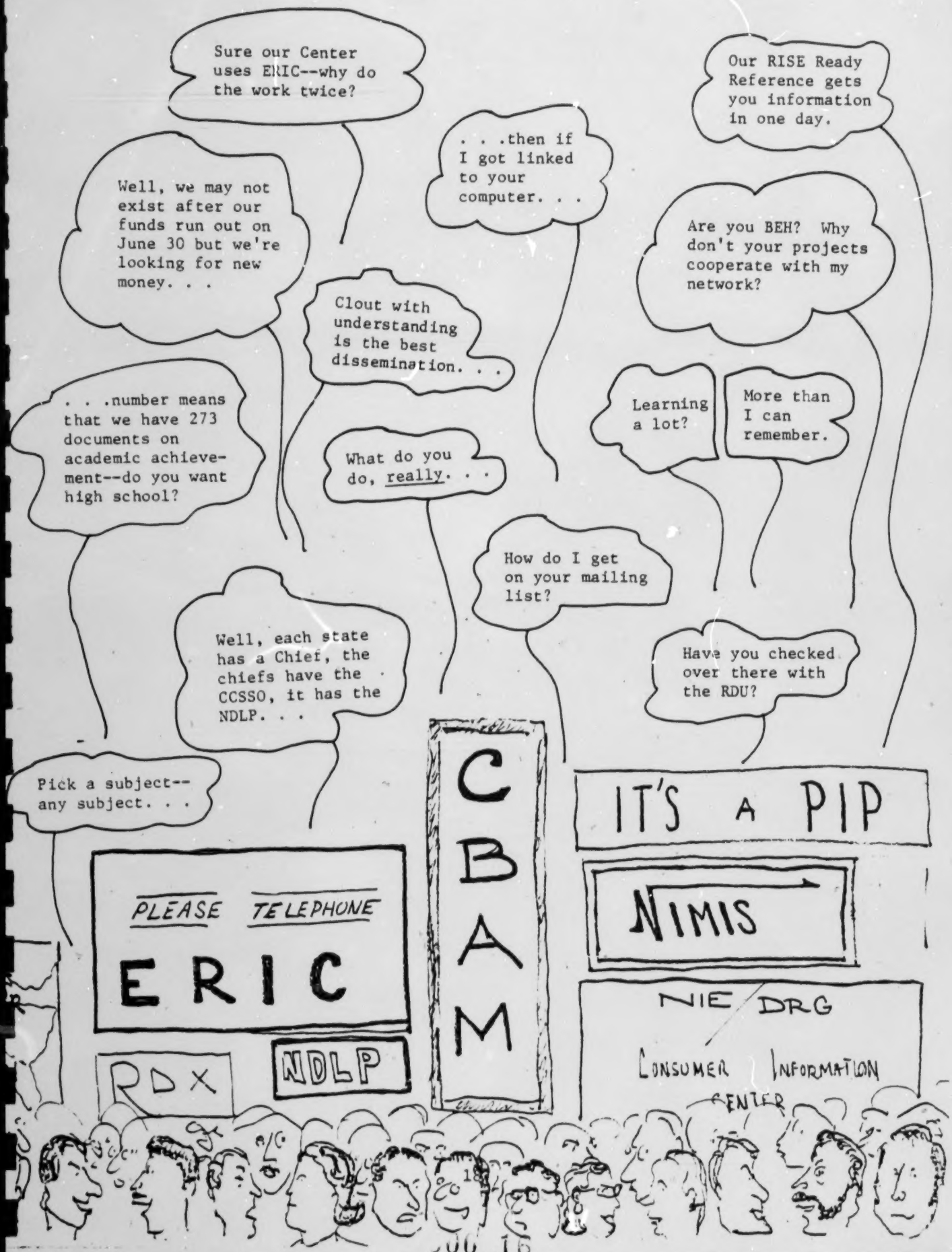
The FORUM was carefully scheduled so that participants learned about each other's activities and values before being brought together into one room to consider whether, as professionals in the field of educational dissemination, they could reach agreement on a set of proposed policy statements. That they did so--by a vote by 191 to 4 (with only 4 abstentions) is a tribute to those who designed and scheduled this first-of-its-kind event.

VIEWPOINTS OF THE PARTICIPANTS:

KEY CONCERNS

...the spirit of the FORUM is best conveyed by the conversations excerpted on the following two pages...


We'll do better than that! We'll come out to your school. . .
. . .so if we got together, we could give the schools a complete one-stop service. . .
Here, write it on the back of my card.
You'd better go check with ERIC.
Do you have any influence with NIE? I want to send them a message.
How can we get those BEH video-tapes.
. . .five things we have learned for sure about face-to-face dissemination . . .
Yes, you can duplicate all our materials.
This will sound simple, but what do you do?
We'll have it to you within a week.
beep. . .beep . . .we are the Northeast Network for curriculum. . . beep. . .
We are the new kid on the block so we try to avoid their turf.
Are these free?
-PRESENTING-
YOUR FRIENDLY
-NNCCVTE-
PUBLIC AWARENESS PROGRAM
RDU
NCEMMH
NATIONAL DIFFUSION NETWORK
CENTER.
CARE
EDUC


Sure our Center uses ERIC--why do the work twice?
Our RISE Ready Reference gets you information in one day.
. . .then if I got linked to your computer. . .
Well, we may not exist after our funds run out on June 30 but we're looking for new money. . .
Are you BEH? Why don't your projects cooperate with my network?
Clout with understanding is the best dissemination. . .
. . .number means that we have 273 documents on academic achievement--do you want high school?
Learning a lot?
More than I can remember.
What do you do, really. . .
How do I get on your mailing list?
Well, each state has a Chief, the chiefs have the CCSSO, it has the NDLP. . .
Have you checked over there with the RDU?
Pick a subject--any subject. . .
C B A M
IT'S A PIP
NIMIS
PLEASE TELEPHONE
ERIC
NIE DRG
CONSUMER INFORMATION CENTER
RDX
NDLP

Overview

Three topics, originally identified in the IPOD and DAG reports, were discussed on Wednesday in the common session. Each addressed an area of concern to members of all five constituent groups: (1) Resources; (2) Linkage; and (3) Research, Evaluation, and Quality Control. FORUM participants selected one of the three topics and spent a full day in discussion. Each topic was subsequently reflected in one of the agreements ratified in the final session of the FORUM (Agreements 4, 5, and 6).

Each group began by identifying and clarifying the existing state-of-the-art, then generated issues, concerns, and problems, and finally made recommendations for necessary action. The three topics, of course, are overlapping rather than discrete. The relationship among them is somewhat clarified by the attention given to each one in the discussion of the other groups.

The Resources Group spent a great deal of effort identifying and sharing a wide range of information in five resource areas: products and practices; networks; existing and needed data files; finances; and people and institutions (human). In effect, they performed a linkage role for each other. In the process of this linking, they cited principles derived from research and from their own experience while identifying problem areas that kept them from more effective performance. As befits a group on resource utilization, it was the only one to compile and distribute notes immediately following its sessions.

The Linkage Group provided an ideal example of the problems involved in effective linkage. Reacting to presentations more often than holding discussions and hearing historical/theoretical perspectives more often than applied perspectives, the participants balked. They argued for more emphasis on the practitioner, against the complexity of model building, and for attention to the needs and knowledge of those actually involved in the linking process.

The Research, Evaluation, and Quality Control Group focused almost by definition on resources and linkage: research needed on linkage, on proper mix of resources, on accessing resources; resources available for research; evaluations of resource systems and existing linking efforts; quality control of resources.

Overall, conference participants were articulate about their needs and attitudes while concerned about the needs and attitudes of others. They exhibited all the characteristics associated with effective disseminators: understanding, concern, and charisma. Compilations of notes from each of the three groups follow. It may be appropriate, as we approach the 1978 FORUM, to note whether the 1977 concerns have changed and how many of the recommendations have been accepted.

1. Resources Group

The reader will note that the Resources Group report (which appears in the Appendix to this report) is far lengthier than those of the other two groups. This is for two reasons. First, the group compiled its own notes. Second, and more important, both the Linkage and the Research, Evaluation, and Quality Control Groups were involved in narrowing down diverse concerns to critical issues and achieving consensus. The Resources Group, however, was engaged in the reverse: spilling out and recording the group's collective knowledge of existing resources.

Their work provides a rich storehouse of assistance and is, therefore, included in the Appendix for the use of all FORUM participants. The information is categorized into five areas:

- National and regional data files-- National data files, such as the Congressional Information Service and the National Instructional Materials Information System (for persons with handicapping conditions), and regional data files, such as the Social Science Consortium (Boulder, Colorado) and the Wisconsin Information Services for Education, are listed. Concerns and recommendations about these data files are also included in the report.

- National and regional networks--National networks and contact persons/institutions are identified, including the National Association for Alternative Schools (Boston University), the Dissemination and Assessment Center for Bilingual Education (Austin, Texas), the Education Commission of the States (Denver, Colorado), and the State library systems. Questions, problems, concerns, and possible solutions are also surfaced.

- Education products and practices--Sixteen products and practices (along with sources of information about them) are listed, including JDRP-approved projects, products and practices developed by the Labs and Centers, Educational Products Information Exchange (EPIE) reports, and products and practices focusing on specific concerns, such as career education, reading, bilingual education, social sciences, and special education.

- Financial resources--Sources, purposes, and examples of information about financial resources at the national, state, and local levels are provided. Examples include the Commerce Business Daily, the Federal Register, and The Foundation Directory at the national level; the state education departments' research and development divisions and DHEW Regional Offices at the regional level; and the PTA and community government agencies at the local level.

- Human resources--Human resources, such as project directors, faculty members, and public librarians, and institutional resources, such as professional associations, universities, and consulting firms, are listed. Problems are surfaced and recommendations are made about human resources, and available access systems are identified.

2. Linkage Group

The Linkage Group spent the majority of its time listening to formal presentations by individuals and to debate among panel members. Both research and experience-based findings were described by both scholars and practitioners including: Matthew Miles, Carnot Nelson, Ronald Havelock, Jay Smink, Glen Beldon, John Hayman, David Crandall, John Emrick, Gene Hall, Sam Seiber, and Charles Mojowski. Their comments are summarized below.

- Linkage is a concept with a long history and a short recent past. It consists of many alternative approaches to distributing knowledge, including teaching, packaging, and consulting. Each is but a partial solution. Time is required to combine the pieces into a complete system servicing the entire education profession.

- The concept of linkage has grown out of:

  - The AERA Committee on Research Utilization (1966)

  - Ron Havelock's work on research utilization

  These led to the creation of the ERIC system (1967) and to Sieber's evaluation of linking systems in state departments of education, which, in turn, led to the Pilot State Dissemination Program (1970-73) and the State Capacity Building Program.

- There is a wide divergence of opinion about the definition of linkage. According to Havelock, linkage connects resource systems to user systems, using primarily interpersonal strategies. This emphasis on the interpersonal has increased in recent years. Early research on dissemination focused on individual farmers and doctors. However, schools, while made up of individuals, are complex social systems.

- There are three types of linkage:

  - Connecting individuals

  - Connecting parts of the same organization

  - Connecting organizations

- The role of the people being linked must be considered.

- The school, not the individual teacher, is the ultimate user and the object of linkage.

- Linking organizations must be institutionalized. All organizations can provide linkage, and all organizations can be linked.

- Successful linkage requires materials, technical assistance, and training.

- Both macro and micro linkage systems should be developed: micro forging interpersonal links, macro forging interorganizational links.
- Using South Carolina as a model, there appear to be many general resources available at the state level including:
  - State consultants
  - State library
  - Network of school libraries
  - State-supported universities
  - State NDN facilitator project
  - State textbook adoption processes
  - Special concern dissemination networks such as special education and vocational education
- The resources system suffers from a series of problems, including:
  - Many linkage activities, all operating independently with no sharing of experience
  - Dependency on Federal funds often causing discontinuities
  - Insufficient evaluation processes and results
  - Perceived competition between state agencies and universities
  - Political rather than substantive decision making
- In spite of these obstacles, there are examples of successful state systems, including:
  - The Georgia RDU Project
  - The Pennsylvania School Improvement Project
  - The Alabama Statewide System
- Linking agents:
  - Should become process generalists
  - Should be full-time in their roles
  - Are most effective when housed externally

- Should have long-term commitments
- Should realize that the power to change rests on those to be changed

- The Concerns-Based Adoption Model:

  Assumptions

  - Change is a process, not an event
  - Adopters first buy an individual, then an organization
  - Change is a highly personal experience
  - Change entails developmental growth

  Stages

  - Refocusing
  - Collaboration
  - Consequence
  - Management
  - Personal
  - Informational
  - Awareness

- Members of the group believe the field should pay less attention to models and more to practitioners

3. Research, Evaluation, and Quality Control Group

Problem areas and recommended solutions:

A. Use of Existing Research and Evaluation Findings

- There is a lack of synthesis of current field evaluation studies. Such a synthesis should be funded with Federal monies.
- There is a lack of consistency in reporting format across studies, thus interfering with consumer use of the results. In addition, there is inconsistent interpretation of results. Common language should be used with emphasis on straightforward reporting.
- There has been no provision for long-term longitudinal follow-up of current studies. Such studies should be required through regulation and funding should be made available.

B. Research and Evaluation (Environment)

- There is a lack of higher education training programs to prepare field evaluation personnel.
- There is a negative attitude toward field utilization studies held by field people.
- There are several general weaknesses inherent in current efforts such as comparisons of unlike practices, lack of testing services, test invalidity, and replication failures.

C. Research and Evaluation (Specific Topical Needs)

There is a need for additional research on:

- What external characteristics make an innovation work
- What internal characteristics make an innovation successful
- What adopters' concerns are
- Discrepancy between rational models of dissemination and real organizational interactions
- Student outcome measures
- Teacher effectiveness measures
- Models of school accountability
- The interaction between variables
- Incentives and rewards for involvement in change

- Viable mechanisms for fostering cooperation and collaboration among and between agencies and individuals involved in dissemination

- Determining the "best mix" of people and materials for a given situation

- Multiple models for measuring impact

D. Definitions

- There is a tremendous need to define the term "adoption," or at least to define multiple types of adoptions.

E. Quality Control (Existing Mechanisms)

JDRP

- There is little field knowledge of failures or of programs currently in the pipeline.

- There are few NIE products approved by the panel.

- There are no field people serving on the panel.

- There is a lack of quality control procedures being applied to the internal JDRP process. There should be guidelines for panel selection and operation as well as for project selection.

ERIC

- There should be discussion of the relative emphasis placed on form vs. content in ERIC's quality control criteria.

F. Quality Control (General Concerns)

- Quality control mechanisms should be developed for second and third generation trainers.

- In addition, projects evolve over time and evidence of effectiveness may shift as the project changes.

- Any system must be aware of the personal biases built into any selection process.

G. A Prioritized Listing of Gaps

- Reporting results to taxpayers

- Designing feedback processes to producers

- Linking data bases

- Quality control for staff at all levels
- School climate information
- Urban adoptions
- Literature synthesis

REACHING THE AGREEMENTS AT THE 1977 FORUM

Following the topical discussions on resources, linkage, and research, evaluation, and quality control, the culminating event of the common session at the FORUM brought all five groups together on Thursday to draw up a set of policy statements on which members could agree. Those present had had two full days to learn more about each other, to identify issues, to pinpoint problems, to consider solutions, and to arrive at a common opinion. Indeed, virtually all of the discussion at the FORUM related in one way or another to the topics addressed by the IPOD and the DAG reports. And those topics had a common theme: the need for better coordination so as to build a nationwide pattern or configuration of dissemination activities.

The FORUM planners sought to find out whether the participants concurred with the major observations in the IPOD and in the DAG reports and whether they favored a nationwide pattern of activity which would link all of them together. The planners knew that a broad consensus would be needed on both questions as a prelude to Federal leadership in improving coordination nationwide And they knew that common action by Federal, state, and local agencies as well as non-government organizations would be absolutely essential; the Federal government would be unable to do the job alone.

When they met on Thursday morning to consider the proposed policy statements, the participants were told by DHEW, USOE, and NIE officials that any agreements they reached would be used as a common conceptual base by all those interested in creating a nationwide pattern of dissemination activities. That is, they were told that the statements of principle or policy they adopted would be available to guide Federal, state, or local agency action as well as action by non-government organizations in improving coordination.

Moreover, the FORUM planners--including state and local dissemination experts--emphasized at the opening of the Thursday session that any statement of agreement by the participants would be considered a "living document" which would grow and change through use and debate and testing. They described the potential statement of agreement as being useful chiefly for its heuristic value rather than for its policy value. That is, they said that any statement of agreement would be used to stimulate thinking rather than to freeze thinking, to guide action rather than to limit action, to be a starting point rather than an ending point.

Working from a draft Statement of Agreement prepared by Greg Benson of the New York State Education Department and Larry Hutchins of NIE, the group considered each of the statements one by one, made a limited number of changes and additions, and adopted the final version by a vote of 191 to 4, with 4 others not voting.

The actual text of the nine agreements appears on the following pages, along with a prefatory statement explaining the circumstances in which they were adopted.

STATEMENT OF AGREEMENT BY PROFESSIONALS
IN THE FIELD OF EDUCATIONAL DISSEMINATION
AT THE JUNE 1977 DISSEMINATION FORUM

Continuous efforts are required to maintain and improve educational practice so that all Americans have the opportunity to learn in accordance with their need. Research, development, evaluation, and dissemination of effective practice are vital to the achievement of this goal.

At the current time a number of agencies, organizations, programs, and systems are working in the area of dissemination. These existing efforts are making significant headway in providing support for educational improvement and should be encouraged to continue.

At the same time it is believed that the results of these efforts will be significantly improved if they can be incorporated into a NATIONWIDE DISSEMINATION CONFIGURATION.* The development of such a configuration can help to alleviate the problems identified by recent analyses and assist the Office of Education, the National Institute of Education, and other elements in the Education Division of HEW in meeting congressional mandates related to dissemination.

The deliberate development of such a nationwide configuration, over time, can also help educators better understand the array of resources available to help them improve the educational system. The undertaking of such a nationwide effort is important; no single agency or group of agencies could or should develop a nationalized system nor could they acquire and manage all the necessary resources.

To promote the development of such a NATIONWIDE DISSEMINATION CONFIGURATION, a group of professionals** working in the area of dissemination met in Arlington, Virginia, for one week in June 1977. They adopted the following statement of agreements as a means of providing a common base for all those who would undertake the development of the NATIONWIDE DISSEMINATION CONFIGURATION. (The recorded vote for adoption was 191 yes, 4 no, 4 not voting.)

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* The word configuration was chosen to coincide with Guba and Clark's use of the term in their paper cited below. The word system was rejected as connoting central control, and network was rejected because of possible confusion with the National Diffusion Network. Guba, Egon G., and David L. Clark, The Configuration Perspective: A View of Educational Knowledge Production and Utilization, Council for Educational Development and Research, Washington, D.C., November 1974.

** Participant groups included representatives from: ERIC clearinghouse personnel and users; evaluation contractors for major dissemination programs in OE and NIE; National Diffusion Network facilitators and developer/demonstrators; National Institute of Education--Office of the Director and Dissemination and Resources Group; Office of the Assistant Secretary for Education; Office of Education--all major bureaus and regional offices; Research and Development Exchange contractors--selected laboratories and centers; Research and Development Utilization contractors; State dissemination representatives--National Dissemination Leadership Project. No official endorsement from any of these groups should be inferred, however.

Agreement 1: The purposes and outcomes of dissemination activities are many, ranging from acquiring knowledge for its own sake to specific improvements in educational practice. Although the adoption of innovations and changes in practice are possible outcomes, dissemination activities can also lead to decisions to maintain existing practices rather than to change.

Agreement 2: A number of efforts have been made to define the word dissemination. These efforts make it clear that several meanings are possible when the word is used. The Dissemination Analysis Group (DAG), a joint Government task force, had delineated four possible usages:

Usage 1: Spread: The one-way casting out of knowledge in all its forms--information, products, ideas and materials--"as though sowing seeds."

Usage 2: Exchange: The two-way or multiway flow of information, products, ideas, and materials as to needs, problems, and potential solutions.

Usage 3: Choice: The facilitation of rational consideration and selection among those ideas, materials, outcomes of research and development, effective educational practices, and other knowledge that can be used for the improvement of education.

Usage 4: Implementation: The facilitation of adoption, adaptation, and installation of improvements.

It is recommended that future usage make clear which, if not all, are denoted.

Agreement 3: The development of a NATIONWIDE DISSEMINATION CONFIGURATION can enhance improvements in educational practice. Such a configuration should be open, nonprescriptive, and multipurpose. It should be influenced by all levels of government and by other groups and individuals, and not dominated by any one.

Agreement 4: An effective NATIONWIDE DISSEMINATION CONFIGURATION will require a broad, integrated resource base of knowledge. Information about educational research and development, practices, policy, and legal matters should all be available through an ERIC-compatible index and a universally available set of access systems. These resources should be based on the current ERIC system, enlarged to encompass the resources of other educational information systems and clearinghouses, as well as the addition of new types of data files as appropriate. Quality control of resources should be maintained. Adequate information should be provided so that the users may judge and evaluate these resources for their own purposes.

Agreement 5: Resources should be accessible to and supported by a variety of means and styles of linkage:

(a) Continuous efforts to organize and transform the knowledge base into language, format, and styles suitable to a variety of different audiences should be maintained. Particular attention should be paid to the needs of educators, lay persons,

policy makers, and especially those individuals that traditionally have not had access to the knowledge base;

(b) Human assistance in searching, interpreting, and supporting the use of the knowledge base should be given by providing services that are accessible to users, provide rapid assistance, and are as objective as possible;

(c) Human, technical, and financial assistance in implementing knowledge that promises to improve educational efforts should be available, particularly to decisionmaking groups within educational institutions. This assistance should include:

- technical assistance in implementing specific innovations, practices, or products that meet the requirements of users;
- assistance to educational institutions to insure that they gain the capability to use knowledge effectively;
- assistance to lay persons and citizen groups that will provide them with the increased capability to influence educational practice;
- encouragement to those who risk changes in the status quo to undertake activities they believe will improve education.

The styles by which such linkage services are available should be broad and nonprescriptive.

Agreement 6: Dissemination, including the NATIONWIDE DISSEMINATION CONFIGURATION, should be an object of study and improvement in its own right.

(a) Information about the configuration should be developed and communicated to insure an informed, public process for coordinating the configuration. Particular emphasis should be placed on the development of information about user needs and requirements--both in terms of new knowledge that should be created through research and development and in terms of services needed from the configuration;

(b) Specific tools, training programs, and other support efforts should be developed to insure the effective strengthening and growth of the configuration;

(c) Research and development on alternative models, theories, and practices of dissemination should be carried out and shared systematically.

Agreement 7: Since the components of the configuration are now, and perhaps always will be, developing, there may be no absolute roles for various agencies, groups, and individuals. In general, however, the configuration should be initiated with these assumptions about functions that should be performed at various levels.

(a) A national level function should be to:

- develop a community of interest that will establish goals for the configuration;
- operate those elements that serve nationwide needs;
- provide incentives for a variety of institutions to build their own capacity to operate the configuration within their spheres of activity;
- and support research and development on the configuration.

(b) A State-level function should be to provide leadership in defining statewide dissemination systems unique to the requirements of each State. The autonomy of States must be carefully preserved, consistent with their constitutional and legal responsibilities;

(c) Agencies engaged in direct instruction and those they serve should be the primary beneficiaries of the configuration. The function of the configuration should be to serve their needs with a minimum of constraint upon them. The configuration should not promote change needlessly; instead, it should support efforts to maintain an environment in which students of all ages can learn. The configuration should recognize the contribution that educators make as a source of exemplary practices and information about the effectiveness of other innovations. The autonomy of these agencies and their boards should be respected.

(d) Educational laboratories, research centers, universities and colleges, professional associations, independent institutions, individual scholars, and professionals should be encouraged to share and provide their knowledge and services through the configuration and to participate in its study and management. They should be encouraged to build their capability to extend the configuration as well as to provide technical assistance to it.

(e) It is recognized that the activities of public and tax-supported agencies are complementary with the activities of the private sector. Functions not adequately provided by the private sector can be undertaken by public and tax-supported agencies in a way that encourages the private sector to be involved to the fullest extent possible.

Agreement 8: Support for such a configuration must be cooperatively shared by all participants and beneficiaries. The development of this configuration will require the expenditure of both fiscal and human energy. These resources are obtainable only through efforts that focus on cooperative and accommodating relationships among participants for the mutual benefit of all.

Agreement 9: The long term vitality of the National Dissemination Configuration is dependent not only on more effective utilization of existing knowledge and resources but also on the continued support for appropriate research and development so as to renew the knowledge base.

ANALYSIS OF AGREEMENTS REACHED AT THE 1977 FORUM

The following pages contain an analysis of the nine agreements which were reached by the dissemination specialists assembled at the 1977 FORUM.

The analysis concentrates on the shortcomings of the agreements in a deliberate attempt to surface the intellectual work yet to be done. The close study needed to make the analysis revealed that the agreements are, as a whole, a comprehensive and coherent statement of the major views and values of those who attended the 1977 FORUM. Moreover, they are an excellent starting point for the next steps in formulating what the agreements themselves call a NATIONWIDE DISSEMINATION CONFIGURATION.

AGREEMENT 1

> The purposes and outcomes of dissemination activities are many--ranging from acquiring knowledge for its own sake to specific improvements in educational practice. Although the adoption of innovations and changes in practice are possible outcomes, dissemination activities can also lead to decisions to maintain existing practices rather than to change.

Analysis

These are broad purposes and outcomes indeed. Moreover, they appear on their face to be conflicting outcomes: change and stability as the twin purposes of dissemination. Agreement 1 merits further study.

The idea that dissemination has multiple purposes and outcomes squares with the fact that the present dissemination configuration transmits theories, research findings, research-based products, innovative instructional materials, exemplary classroom practices, and validated educational programs. Many purposes underlie the decisions to disseminate this wide array of "information," and many outcomes can of course be expected.

Avoiding a Too-Narrow Criterion for Success. Agreement 1 safeguards the dissemination configuration from being judged by a narrow criterion, such as a rise in achievement test scores in the basic skills or an increase in the number of high schools offering Experience-Based Career Education. That is, Agreement 1 makes it quite clear that a dissemination activity can be declared a success even if new practices are not adopted and even if student learning does not improve.

Adopting a Too-Broad Criterion for Success. But in solving that problem--the danger of being faulted on narrow criteria--Agreement 1 opens the issue as to how to judge successful dissemination. That is, if knowledgeable change in a school signifies that a dissemination activity has succeeded and if knowledgeable refusal to change in a school signifies equally that the dissemination activity has succeeded, are we to conclude that dissemination has succeeded whether schools change or not? It seems doubtful that such a conclusion would be acceptable to outsiders on whom disseminators ultimately depend for their funds, outsiders such as the Congress, state legislators, and boards of education.

How To Measure Success. Then there is the matter of how to measure success if a dissemination activity does not change the observable external behavior of the person or organization being served. If the activity produces a non-observable internal change, such as "acquiring knowledge for its own sake," how is that to be measured? Can we settle for the user's testimony that he or she has acquired knowledge and is satisfied? Can we simply settle for the fact that he or she continues to subscribe to the dissemination service? Or, given the multiple purposes and outcomes of dissemination, do we need to evaluate at all?

Perhaps what the agreement implies for evaluation is that each dissemination

activity should declare its own objectives and should be evaluated on those but not on other objectives.

Controlling Quality at the Output End or at the Input End? Furthermore, given the multiple purposes and outcomes of dissemination, why is "quality contol"—a matter of some controversy during the discussions--important? Does Agreement 1 support the participants who contended that quality control should be exercised by the user at the output end of the system rather than by the disseminator at the input end of the system?

The argument would run like this: The purposes and outcomes of dissemination are so numerous that those who put information into the system cannot know in advance what the users will do with it and thus cannot filter out information as being "below standard." That is, not knowing the user's purposes, the disseminators cannot set standards to prevent information from entering the system. Instead, the user must set standards to prevent information from exiting from the system, depending upon the purposes for which he or she wants to use the information.

Or does Agreement 1 support the participants who insisted that disseminators must control the quality of the input?

The argument would run like this: Given the multiple purposes and outcomes of dissemination, it is essential for those who control input to set quality filters since they cannot anticipate who will use the information for what purposes and with what error and lack of quality control at the point of output.

Duties of Disseminators. Agreement 1 raises another issue as well: What are the responsibilities of those charged with dissemination? What is the scope of their work? Given the breadth of their purposes and the variety of their outcomes, what fraction of the total educational budget do they deserve? Taking into account the range of their effects, for what can they be held accountable in an age of accountability? If Agreement 1 protects disseminators from being found guilty because they have not achieved certain narrowly described purposes, what will protect them from being found guilty because they have not achieved a broad band of purposes? Have they bought their freedom from a narrow obligation they may not be able to meet by accepting a broad obligation they cannot meet?

AGREEMENT 2

A number of efforts have been made to define the word dissemination. These efforts made it clear that several meanings are possible when the word is used. The Dissemination Analysis Group (DAG), a joint Government task force, has delineated four possible usages:

Usage 1: Spread: The one-way casting out of knowledge in all its forms--information, products, ideas and materials--"as though sowing seeds."

Usage 2: Exchange: The two-way or multiway flow of information, products, ideas, and materials as to needs, problems, and potential solutions.

Usage 3: Choice: The facilitation of rational consideration and selection among those ideas, materials, outcomes of research and development, effective educational practices, and other knowledge that can be used for the improvement of education.

Usage 4: Implementation: The facilitation of adoption, adaptation, and installation of improvements.

It is recommended that future usage make clear which, if not all, are denoted.

Analysis

Distinguishing among alternative meanings for the term dissemination is clearly worthwhile. Certainly the word means different things to different people, and the DAG is wise in asking the speaker to supply the particular definition used. But even the four definitions offered here seem incomplete. The problem may be a lack of differentiated terminology or, more seriously, it may be a lack of conceptual clarity. The first could be cured by adopting or coining other terms; the second might require considerable re-thinking about what dissemination actually is.

Is Knowledge Everything? In Usage 1, the term knowledge is defined as information, products, ideas, and materials. Knowledge, then, is not only information about resources: it is the resources themselves. Thus the disseminator of knowledge is, by definition, a disseminator not only of information about resources but a disseminator of the resources themselves. This raises a question: can the same organization, people, and procedures be used to transmit intangible ideas and tangible products? Should they?

Consider the alternative: a division of labor in which organizations such as school districts supply demonstrations, publishers supply instructional materials, and universities supply training. Have we found such a division of labor to be defective? Have schools failed to improve because they do

not have one-stop shopping so that they can get demonstrations and materials and training--and research, and technical assistance, and whatever else they need--from a single place? How large would such an institution have to be? How many of them would be needed to serve 15,000 school districts and 3,000 colleges? Where would they be located? Does any existing "dissemination" agency have such capabilities?

In short, if Usage 1 means that knowledge is everything, what kind of agency could transmit it?

What About a "One-Way Casting Out" of Needs? The dominant "model" used at the 1977 FORUM was that of a resource system and a user system joined by a linking system. The resource system has information, products, ideas, materials, and potential solutions, while the user system has needs and problems; the job of the linking system is to make a match. (This formulation is used throughout Agreement 2 as well as in other agreements.)

It would logically follow that, if resources can be cast out in one direction (see Usage 1), then needs can be cast out in the other direction. That is, if resources can be spread through a one-way process, why can't needs be spread through a one-way process? If a resource system can unilaterally spread its knowledge, why can't a user system unilaterally spread its needs?

If the one-way "spreading" of needs is missing from the usages cited by the DAG, is it also missing from the conceptual structure in which we think about dissemination? Do disseminators need a better theoretical structure, a better intellectual map, which allows for the idea that users can and should "sow their needs" as actively as knowledge developers and disseminators "sow their seeds"? Is there simply some language missing in Agreement 2 or is there a concept missing in professional practice?

Do Linkers Know the Questions as Well as They Know the Answers? In Usage 2: Exchange, there is a two-way or multi-way flow. Are linking systems (disseminators) equally capable of handling traffic in both directions? Do they know as much about needs as they do about resources? If McGraw-Hill asked the typical linker what school districts need, would McGraw-Hill get a good answer? If a school district asked the same linker what McGraw-Hill has available, would it get a better answer? Can linkers guide exchange if they don't know both sides of the equation?

Right Function, Wrong Label. Both Usage 3: Choice and Usage 4: Implementation are examples of labels not matching what's in the package. Mislabeling is usually a serious problem for a reader. But, in the case of definitions, mislabeling is an equally serious problem for the writer, for it suggests that both writer and reader are being misled. In Usage 3, the term choice and the definition of the term describe user behavior. Similarly, in Usage 4, the term implementation and the definition describe user behavior.

Did the DAG have a mere slip of its pen or is there an intellectual problem here? Spread is a term for linking behavior; exchange is a term for mutual activity by resource providers and resource users; choice is a term for user behavior; implementation is a term for user behavior.

In short, the definitions claim to describe linking behavior, but actually describe the behavior of resource providers, linkers, and resource users.

The analysis can be sharpened by arranging the terms and their definitions in three columns, as shown in the chart on the following page. Examining the chart shows immediately what is missing. A great deal is missing.

If linking systems connect resource systems to user systems, then both resource systems and user systems must do something after they are connected. But the chart shows that under the DAG definitions of dissemination--four definitions clearly intended to encompass all forms of dissemination--the resource system does nothing once the connection is made and the user system does something only half the time--namely, when its choice or implementation is being facilitated.

What kind of "linkage" is this? By definition, linkage requires three elements: something on the left, something on the right, and something in the middle to connect them. This is the distinguishing feature of the "linkage model" used at the 1977 FORUM.

To repeat, the DAG may have had a slip of the pen rather than a slippage of the intellect. Perhaps it simply meant to point out that dissemination is used to indicate four different types of linking behavior. Perhaps it used the word choice because it didn't have a better term for "The facilitation of rational consideration and selection . . . ." Perhaps it used the word implementation because it didn't have a better term for "The facilitation of adoption, adaptation, and installation . . . ."

Still, if facilitation were discussed so much by participants at the 1977 FORUM--as indeed it was--why don't disseminators have a word to describe the very behavior which many of them think is the best type of dissemination? Well, isn't facilitation itself precisely the right term? Doesn't it describe exactly what disseminators do to help users choose and implement? No, it doesn't. Facilitation is the effect on the user of the disseminator's behavior. That is, the user's work in choosing and implementing is facilitated, meaning made easy, but--and this is the most significant question one could ask--what is the disseminator's behavior that facilitates the user's choice and implementation? We know the effect on the user: facilitation. But what is the behavior which is facilitating?

In short, since choice and implementation are the most important behaviors of the user, it is essential to know what behavior the disseminator employs to get the user to choose and implement. But it is exactly here, at this critical point, that the DAG definitions substitute descriptions of what users do when we need descriptions of what disseminators do.

DAG DEFINITIONS OF DISSEMINATION

	Resource System	Linking System	User System
Usage 1	? : ? ?	Spread: The one-way casting out of knowledge in all its forms--information, products, ideas and materials--"as though sowing seeds."	? : ? ?
Usage 2	? : ? ?	Exchange: The two-way or multi-way flow of information, products, ideas, and materials as to needs, problems, and potential solutions.	? : ? ?
Usage 3	? : ? ?	? : The facilitation of ... ? ?	Choice: .... rational consideration and selection among those ideas, materials, outcomes of research and development, effective educational practices, and other knowledge that can be used for the improvement of education.
Usage 4	? : ? ?	? : The facilitation of ... ? ?	Implementation: ... adoption, adaptation, and installation of improvements.

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By analogy, consider teaching as a form of linking behavior: the teacher connects the student to the subject matter, brings together the learner and what is to be learned. If the DAG were describing teaching, its four definitions would read something like this:

Usage 1: Lecture: The one-way casting out of knowledge . . .

Usage 2: Laboratory: The two-way or multi-way flow of information between student and scientific equipment. (Wait! What is the teacher doing to enhance that flow?)

Usage 3: Thinking: The facilitation of rational consideration by the student. (Wait! Wait! What is the teacher doing to facilitate the student's thinking?)

Usage 4: Action: The facilitation of adoption, adaptation, and internalization of better behavior by the student. (Now wait just a minute! Just exactly what is the teacher doing to facilitate such behavior by the student?)

Or to put the matter another way, the DAG lets the teacher disappear from view just as the student begins to do something really important. The DAG wouldn't even give a label for the teacher's behavior, much less a description.

But, for the last time, is all this a mere matter of wording? Or is it the opposite, something far more fundamental: disseminators don't actually know what behavior they should use to facilitate rational choice and effective implementation by the user. Are they like teachers who know that students are supposed to come out of their classes thinking and acting but whose only teaching behaviors are lectures and laboratory exercises? Consequently, when they are asked to teach other teachers (that is, teach education courses), they explain that lectures and laboratory exercises will produce "low-level" student behaviors (knowledge and understanding?)--and here is the sleight of hand, or mind--but that teachers must also facilitate "high-level" student behaviors (rational choice and effective action?).

Look again at the chart displaying the DAG definitions of dissemination. As the disseminator moves up the levels from 1 to 4, is the user being moved up some sort of cognitive/affective hierarchy from 1) awareness/knowledge to 2) understanding/interest to 3) trial/evaluation to 4) adoption/incorporation? (Readers familiar with educational literature will doubtless recognize the amalgamation of the Taxonomy with Rogers' stages of adoption and McLaughlin's formulation of mutual adaptation.)

Has the Linking System Absorbed the Resource System? The chart displaying the DAG definitions shows that the resource system has disappeared. That is, as pointed out above, once the linking system goes into action and connects the resource system to the user system, the resource system evaporates. A possible reason for this may be that--by blind accident or grand ambition, probably the latter--the linking system has absorbed the resource system. Obviously, resources are still being delivered to the user--otherwise, the user could not "use." Who is making the delivery?

The best clue that the linking system is delivering the resources appears in Usage 1: Spread, where we are told that knowledge is information, products, ideas, and materials. Since we know that disseminators spread knowledge, it follows that they are spreading not only information about resources, but also the resources themselves. Clearly then, the disseminators are delivering the resources.

Is such a claim anything more than a grand conceit? If resources are "products, practices, people--anything a school can use to teach students," how can disseminators say they are delivering anything more substantial than information--not the actual resources themselves? Certainly they are not delivering demonstrations and instructional materials and training and technical assistance and whatever else schools need? What are the publishers and the universities and the other "resource systems" doing? It must be something; they are getting paid to do it.

It seems probable that the disseminator as provider-of-resources arises from the fact that some dissemination systems have picked up small-scale "home-made" innovations created by local school districts--and even by individual classroom teachers--and are actively disseminating them. The typical government-issued PIP, for example, is a relatively complete resource package in and of itself. The PIP may contain not only a description of the innovation, but the teacher training materials and the student instructional materials and tests needed to make it work. Some of what is being disseminated are innovative practices--such as peer tutoring--which require a rearrangement of the typical elements of a school (in peer tutoring, students become teachers), but no new or additional resources. And some of the innovations being disseminated require (or provide) only a few hours of teacher training, which the disseminator can supply in a single day. For such innovations, there is little or no difference between information about resources and the resources themselves. They are, in effect, "information innovations": once a teacher or a school has the information, they have everything there is; there are no other resources. In such a case, the linking system has become the resource system; when the linkers provide information--their customary stock-in-trade--they have provided everything there is.

Such innovations, incidentally, may be particularly attractive to disseminators because they can offer schools complete one-stop shopping. Such innovations enlarge the role of the disseminator into both linker and resource, and may enlarge job satisfaction as well. If so, this would bias disseminators toward "information innovations" and away from innovations requiring complex, numerous, pupil materials and extensive, expensive teacher training. Would analysis of the innovations being disseminated by the five major systems represented at the 1977 FORUM show such a bias?

In summary, the resource system may be conspicuously inactive in the chart of DAG definitions because it has (sometimes) been absorbed into the linking system.

AGREEMENT 3

> The development of a NATIONWIDE DISSEMINATION CONFIGURATION can enhance improvements in educational practice. Such a configuration should be open, nonprescriptive, and multi-purpose. It should be influenced by all levels of government and by other groups and individuals, and not dominated by any one.

Analysis

This agreement should be considered in this context: both the IPOD Report and the DAG Report which led to the 1977 FORUM were sponsored by DHEW and the five major dissemination systems represented there are being supported by DHEW.

One might at first think of these as "Federal" rather than as "nationwide" enterprises. Moreover, each one of the five is, without exception, a firmly structured system operating under government contract with paid professional personnel performing specialized functions within institutional frameworks in known locations. Accordingly, one might reasonably expect them to be called a set of systems rather than a "configuration." (The source and connotation of the term are discussed in the analysis of Agreement 7.)

Then does the phrase NATIONWIDE DISSEMINATION CONFIGURATION constitute a denial of their true character or rather signify their desire to function in actual practice as something other than Federal dissemination systems?

Perhaps some of both. Certainly they are not as non-governmental, as voluntary, and as unrestricted as the words NATIONWIDE DISSEMINATION CONFIGURATION connote. But certainly they want to act as though they were exactly that: non-governmental, voluntary, and unrestricted. If the 400 dissemination specialists at the FORUM were of a single mind about any one thing, it was about their determination to represent local and state as well as Federal interests, to use decentralized governance, to be client-sensitive, to represent the concerns of user systems as well as (or better than) those of resource systems, and to be open to influence by all.

Can Federal Systems Represent Local and State Interests? It would be reasonable to expect that dissemination systems supported by DHEW would reflect its concerns. Indeed, one might argue that the systems would not otherwise merit DHEW support. To test for such a bias, one might identify DHEW's educational concerns and see whether they are heavily represented--or perhaps overrepresented--in the work of the five systems.

DHEW's concerns over the past decade have been: educating the disadvantaged, integrating the minorities, educating the handicapped, extending vocational and career education, promoting new instructional media, teaching basic skills, and evaluating student achievement. The preponderance of the knowledge offered by the five dissemination systems fall into those categories. (If the dissemination systems supported by NIE and BOAE had been represented at the conference, that statement would be even more true.) Finally, most of the know-

ledge being handled by the five systems was purchased at DHEW expense.

If States and Localities Paid the Piper . . . Can there be a genuine NATION-WIDE DISSEMINATION CONFIGURATION when there are so few state-supported and locally-supported dissemination systems? How can there be a three-way federated system if the Federal government pays everything?

What does it signify that even state education agency dissemination activities are being bankrolled by Uncle Sam? Or should we consider that the states are doing their share through the daily operation of state education agencies and intermediate school service agencies, even though they employ few dissemination specialists?

What does it mean that there is not a single collaborative among local school districts with a locally-supplied dissemination budget even approaching one million dollars? Or should we regard the daily operations of local school districts as a powerful influence on dissemination, even though they employ few dissemination specialists?

AGREEMENT 4

> An effective NATIONWIDE DISSEMINATION CONFIGURATION will require a broad, integrated resource base of knowledge. Information about educational research and development, practices, policy, and legal matters should all be available through an ERIC-compatible index and a universally available set of access systems. These resources should be based on the current ERIC system, enlarged to encompass the resources of other educational information systems and clearinghouses, as well as the addition of new types of data files as appropriate. Quality control of resources should be maintained. Adequate information should be provided so that the users may judge and evaluate these resources for their own purposes.

Analysis

This is a large order indeed. Although recommended by dissemination specialists for many years, it has yet to be accomplished. While an enormous amount of information has been added to the ERIC system, an enormous amount of information related to education has been generated. Is the proportion of the relevant information contained in ERIC larger or smaller than 10 years ago?

Toward a Universal Knowledge Base. Every forward-looking information specialist dreams about a universal system with a uniform index. However, not all information specialists define knowledge as information, products, ideas, and materials (see Usage 1: Spread in Agreement 2). A comprehensive information system with a common index is visionary; a comprehensive knowledge system is even more visionary. Taking the word knowledge as defined by FORUM participants, the system would contain every known textbook, test, film, recording (and microscope and football helmet?) used in education. Is that what Agreement 4 means? What of proprietary interests, copyrights, royalties, storage space, delivery vehicles, costs?

A universal information system, perhaps. A universal knowledge system, probably not. Agreement 4 needs to meet Agreement 2. Then Agreement 4 needs to be carefully re-thought and clarified.

Quality Control or Truth-in-Labeling? It would be possible to guarantee quality by controlling input into an information system through massive effort, but the effort required to do that for the kind of universal knowledge envisioned in Agreement 4 would be enormous. Moreover, there are trade-offs between universality and quality: one is usually bought at the expense of the other.

It would also be possible to control quality at the output end of an information system by including enough information about the information in the system to let users judge its worth. Again, the effort would be massive for an information system and, doubtless, enormous for a knowledge system. Moreover, it would probably require widespread training so that users could use the information about the information.

The choice between controlling quality at the output end or at the input end is discussed in the analysis of Agreement 1.

AGREEMENT 5

Resources should be accessible to and supported by a variety of means and styles of linkage:

a) Continuous efforts to organize and transform the knowledge base into language, format, and styles suitable to a variety of different audiences should be maintained. Particular attention should be paid to the needs of educators, lay persons, policy makers, and especially those individuals that traditionally have not had access to the knowledge base;

b) Human assistance in searching, interpreting, and supporting the use of the knowledge base should be given by providing services that are accessible to users, provide rapid assistance, and are as objective as possible;

c) Human, technical, and financial assistance in implementing knowledge that promises to improve educational efforts should be available, particularly to decisionmaking groups within educational institutions. This assistance should include:

- technical assistance in implementing specific innovations, practices, or products that meet the requirements of users;
- assistance to educational institutions to insure that they gain the capability to use knowledge effectively;
- assistance to lay persons and citizen groups that will provide them with the increased capability to influence educational practice;
- encouragement to those who risk changes in the status quo to undertake activities they believe will improve education.

The styles by which such linkage services are available should be broad and nonprescriptive.

Analysis

The use of the term resources and knowledge to replace the term information places a monumental--and perhaps unintended--burden on disseminators. In the usual discussion of dissemination, for example, the first item in Agreement 5 would read as follows: a) Continuous efforts to organize and transform

the information into language, format, and styles suitable to a variety of different audiences should be maintained. That makes sense. But when the term knowledge base is substituted for the term information, as FORUM participants have done in Agreement 5, the meaning is changed radically. Given the fact that knowledge was used at the FORUM to mean not only information about resources but the resources themselves, and given the fact that the term resources means products and materials (as well as everything else), disseminators have perhaps agreed to bite off more than they can chew. Literally, Agreement 5 obligates them to transform products and materials " . . . .into language, format, and styles suitable to a variety of different audiences. . . ." Isn't such a transformation of products—textbooks, films, recordings, kits, maps, globes, hand calculators, etc.—the work of product developers rather than the work of product disseminators? Or does Agreement 5 indicate that disseminators are in fact dead serious about absorbing all the functions of the resource system? (That topic is explored at length in the analysis of Agreement 2.)

Going Downstream as Far as Going Upstream. Section c) in Agreement 5 sends disseminators as far into the territory of the user system as earlier agreements sent it into the territory of the resource system. Given the all-encompassing definition of knowledge cited earlier, disseminators agreed at the 1977 FORUM to supply human, technical, and financial help to schools and colleges in adopting, adapting, and installing products and materials as well as incorporating new ideas and professional practices. Moreover, disseminators agreed to empower (knowledge is power) citizens to change the schools. And they agreed to encourage risk-takers to change the status quo.

Is this the kind of help the Central Intelligence Agency gives the citizens of a dictatorship? Are there any boundaries to dissemination activities--financial, ethical, or otherwise? Is there any point at which giving information shifts from offering technical assistance to supporting revolutionary activity? What if established school authorities oppose a change and a significant citizens' group favors it? Does the disseminator automatically side with the citizens because they want to change the status quo? Or since FORUM participants said that "dissemination activities can also lead to decisions to maintain existing practices rather than to change" (see Agreement 1) does the disseminator automatically side with the school authorities? On the other hand, what if the authorities want change and the citizens do not? Does the disseminator automatically side with the group favoring change, as Agreement 5 seems to suggest?

In short, how deeply does the disseminator participate in the life of the user system? And does the disseminator take along his/her values and use them to choose sides when there is a conflict or does the disseminator work as a value-free technician?

AGREEMENT 6

Dissemination, including the NATIONWIDE DISSEMINATION CONFIGURATION, should be an object of study and improvement in its own right.

a) Information about the configuration should be developed and communicated to insure an informed, public process for coordinating the configuration. Particular emphasis should be placed on the development of information about user needs and requirements--both in terms of new knowledge that should be created through research and development and in terms of services needed from the configuration;

b) Specific tools, training programs, and other support efforts should be developed to insure the effective strengthening and growth of the configuration;

c) Research and development on alternative models, theories, and practices of dissemination should be carried out and shared systematically.

Analysis

The first item in Agreement 6 gives a partial answer to an earlier question about whether disseminators understand the user systems as well as resource systems. Apparently not. Otherwise they would not need to place particular emphasis on studying user needs and requirements.

Although the third item in Agreement 6 calls for research and development on alternative approaches to dissemination, the nine agreements reached at the 1977 FORUM seem bound together by widely-shared, deeply-held values which are beyond the reach of research and development. Those values include decentralized control, high participation by all parties, a loose configuration of dissemination agencies rather than a carefully-designed system, the dissemination of knowledge (very broadly defined) rather than information about resources, and an extremely diverse set of roles for the disseminator, including deep penetration into the territory of the resource system and the user system. How heavy would empirical data weigh in influencing the thinking of the 1977 FORUM participants if it did not coincide with these values? Suppose, for example, it were to be proposed that disseminators employed by resource systems to promote particular products--textbook salespersons, for instance-- are more effective in getting schools to change than disseminators who stand on neutral territory--neither a part of the resource system or the user system? And suppose it were further proposed that while local school districts will pay little or nothing for the services of general-purpose dissemination specialists located in neutral territory--linkers, in short--they will pay the full salaries of disseminators employed by resource systems to promote particular products. That is, schools will willingly pay enough for textbooks to supply substantial sales commissions for the "disseminator." Would the 1977 FORUM participants energetically support a Federally-subsidized competition to test those propositions?

AGREEMENT 7

Since the components of the configuration are now, and perhaps always will be, developing, there may be no absolute roles for various agencies, groups, and individuals. In general, however, the configuration should be initiated with these assumptions about functions that should be performed at various levels.

a) A national level function should be to:

- develop a community of interest that will establish goals for the configuration;
- operate these elements that serve nationwide needs;
- provide incentives for a variety of institutions to build their own capacity to operate the configuration.

b) A State-level function should be to provide leadership in defining statewide dissemination systems unique to the requirements of each State. The autonomy of States must be carefully preserved, consistent with their constitutional and legal responsibilities;

c) Agencies engaged in direct instruction and those they serve should be the primary beneficiaries of the configuration. The function of the configuration should be to serve their needs with a minimum of constraint upon them. The configuration should not promote change needlessly; instead, it should support efforts to maintain an environment in which students of all ages can learn. The configuration should recognize the contribution that educators make as a source of exemplary practices and information about the effectiveness of other innovations. The autonomy of these agencies and their boards should be respected.

d) Educational laboratories, research centers, universities and colleges, professional associations, independent institutions, individual scholars, and professionals should be encouraged to share and provide their knowledge and services through the configuration and to participate in its study and management. They should be encouraged to build their capability to extend the configuration as well as to provide technical assistance to it.

e) It is recognized that the activities of public and tax-supported agencies are complementary with the activities of the private sector. Functions not adequately provided by the private sector can be undertaken by public and tax-supported agencies in a way that encourages the private sector to be involved to the fullest extent possible.

Analysis

Agreement 7 states the case for the "configurational perspective," following the work of Guba and Clark, cited elsewhere. The most attractive feature of the configurational perspective is its perspective that there is no configuration. It can well be called the "anticonfigurational perspective" in that it lists the agencies concerned with school improvement, presents their own preferences as to their roles, and carefully avoids placing them in any configuration. That is, Guba and Clark do not line the agencies up in any sequence and do not assign particular functions to them. Instead, they offer the view that each agency should be allowed to do its own thing--not necessarily the thing it does best, but the thing it would like to do. They advance the view that the agencies cannot be arranged in any given relationship because, in fact, the optimum relationship is probably whatever they work out among themselves

That perspective was particularly attractive to the 1977 FORUM participants, given their values. (See the analysis of Agreement 6 for a summary of those values.)

The strength of the configurational perspective is, of course, its weakness. Since there can be no planned arrangement of the agencies, there can be no rational experimentation as to the best arrangement. It follows that any configuration the agencies work themselves into is the best of all possible arrangements. Thus, any intervention to rearrange things would make the situation worse.

Agreement 7 maximizes the functions of all agencies at the expense of none. There is, under the configurational perspective, no alternative.

AGREEMENT 8

> Support for such a configuration must be cooperatively shared by all participants and beneficiaries. The development of this configuration will require the expenditure of both fiscal and human energy. These resources are obtainable only through efforts that focus on cooperative and accommodating relationships among participants for the mutual benefit of all.

Analysis

Support for dissemination activities--even for the dissemination of knowledge as it is broadly defined in Agreement 2--is not now "cooperatively shared by all participants and beneficiaries." The Federal government--specifically, DHEW--pays an entirely disproportionate share and probably exerts disproportionate influence.

Agreement 8 is an exhortation beyond criticism. But states and localities are unlikely to respond unless it is accompanied by an operational plan. Participants at the 1977 FORUM did not suggest how cooperatively shared support might be obtained.

AGREEMENT 9

> The long term vitality of the National Dissemination Configuration is dependent not only on more effective utilization of existing knowledge and resources but also on the continued support for appropriate research and development so as to renew the knowledge base.

Analysis

The view that knowledge must be forever renewed through research and development was a sound and fitting final agreement at the 1977 FORUM. Given their configurational perspective, the participants were unable to indicate whether research and development should be a Federal, state, or local function and whether it should be conducted by public or private agencies or a combination. Indeed, under the configurational perspective, the agencies themselves would decide whether to carry out research and development; there would be no central plan.

TOWARD A TEMPLATE FOR DISSEMINATION ACTIVITIES

Do we know enough to examine a blueprint for dissemination activities and judge its prospects? Do we have specific criteria for checking its elements one by one to locate its strong points and its weak points? Do we have a template with which we could originate a blueprint if none existed?

An observer at the 1977 FORUM could have taken excellent notes toward a template by circulating among the 400 dissemination specialists present and listening closely. At the FORUM, in the experience and in the testimony of the participants, an observer could have heard an accumulation of empirical findings and folk wisdom representing much of what we have learned in the past two decades of success and failure.

The observer's notebook might have read something like this:

- Distinguish among these three "systems":
  - Resources--products, practices, people--anything a school can use to teach its students.
  - Users--teachers, administrators, students, parents, boards of education, taxpayers, state legislators--anyone who decides what resources a school will use to teach its students.
  - Linkers--dissemination organizations and dissemination specialists--any agency and any person who connects (links) users to resources.
- Resources (or resource systems) should offer:
  - Orientation/leadership training and materials for administrators.
  - Skill training and materials for teachers.
  - Instructional materials for students.
  - Descriptive materials for parents and other citizens.
  - Evaluation instruments.
  - Continuing refreshers/technical assistance/consultation for administrators and teachers.
- Users (or user systems) should:
  - Be able to articulate local needs for resources.

- Learn to consume information about available resources.
- Anticipate how an innovation will need to be adapted to the local schools.
- Anticipate how the local schools will need to be adapted to the innovation.
- Be ready, willing, and able to make the full range of institutional adjustments needed to accomplish the innovation: school board endorsement, administrator orientation, teacher training, parent awareness, new equipment, new materials, new tests, new schedules--and nothing less.

- Linkers (or linking systems) should be able to:
  - Determine both what users need and what resources are available.
  - Tell resource systems what users need.
  - Train users to consume information about resources.
  - Provide comprehensive information on research findings and on all available products, practices, and people.
  - Supply evidence that the products, practices, and people work.
  - Produce audience-targeted information (leaflets, tapes, slides, whatever) for various members of the user group.
  - Arrange demonstrations in realistic settings.
  - Suggest how the innovation will have to be adjusted to the school and how the school will have to be adjusted to the innovation.
  - Help users arrange to get the full array of resources and make the full array of local adjustments needed for the innovation.
  - Tell whether the innovation has been adopted (or sensibly adapted).
  - Communicate with users in a continuous, long-term, face-to-face, interactive mode.

GLOSSARY

DEHYDRATED ACRONYM SOUP

A Product of DHEW

BEH	Bureau of Education for the Handicapped in USOE
BOAE	Bureau of Occupational and Adult Education in USOE
DAG	Dissemination Analysis Group appointed by Dissemination Policy Council in DHEW Education Division
DRG	Dissemination Resources Group established by NIE tc study dissemination
DHEW	U. S. Department of Health, Education, and Welfare
ERIC	Educational Resources Information Center in NIE
ESEA	Elementary and Secondary Education Act of 1965 administered by USOE
FIPSE	Fund for the Improvement of Postsecondary Education in DHEW Education Division
ISOD	Interstate Project on Dissemination conducted by NIE
LEA	Local Education Agency (that is, local school district)
NCEMMH	National Center on Educational Media and Materials for the Handicapped--a USOE-funded effort to serve as a clearinghouse on instructional media for the handicapped
NDEA	National Defense Education Act of 1958 administered by USOE
NDLP	National Dissemination Leadership Project--an NIE-funded effort operated by the Council of Chief State School Officers to improve the dissemination capability of state education agencies
NDN	National Diffusion Network--a USOE-funded effort to help states disseminate proven innovations to the schools
NIE	National Institute of Education in DHEW Education Division
NNCCVTE	National Network for Curriculum Coordination in Vocational and Technical Education--a USOE-funded effort to help states and localities share curriculum development and services
NSF	National Science Foundation--a Federal agency independent of DHEW which funds innovative projects to improve science curriculum and teaching

PIP	Program Information Packages authorized by the NIE/USOE Joint Dissemination Review Panel to give accurate information about proven innovations
RDU	Research and Development Utilization Program--an NIE-funded effort experimenting with better ways to identify school problems and supply research-based products to solve them
RDX	Research and Development Exchange--an NIE-funded effort under which regional laboratories and university centers help states with dissemination
SEA	State Education Agency--ordinarily titled Department of Education or Department of Public Instruction
USOE	U. S. Office of Education in DHEW Education Division

APPENDIX

Report of the Resources Group

National and Regional Data Files

Chairperson, Harry Osgood
Educational Resources Center
New Haven, CT

I. National Data Files

1. Educational Statistics — National Center for Educational Statistics
2. Smithsonian Science Information Exchange
3. Congressional Information Service
4. Federal Index (Federal Register)
5. Public Affairs Information Service (PAIS)
6. Child Abuse and Neglect File
7. NICEM
8. NIMIS — National Instructional Materials Information System (for persons with handicapping conditions)
9. MEDLARS/MEDLINE — Medical information data base
10. National Institute of Mental Health (NIMH)
11. National Institute of Health (Child Research Grants)
12. Library Information Science Abstracts (LISA)
13. National Agricultural Library File (CAIN)
14. OCLC
15. BALLOTS -- an online cataloging and processing system
16. National Network for Curriculum and Vocational Information
17. NEXUS — Post-secondary education data base
18. Project SHARE - human resources
19. American Statistics Index

II. Regional Data Files

1. California — SMERC (San Mateo Educational Resources Center)
   LAP Collection (Learning Activity Packages)
   FIDO system (fugitive document classification system)

2. Colorado — Social Science Consortium, Boulder
   Social Science Curriculum Guides and Materials

3. Connecticut — ERC (Educational Resources Center, New Haven)
   LAP Collection
   Legislative Current Status File

4. Massachusetts
   CBIS — Collective Bargaining Information Service

5. Montana
   Career Education Units — Learning Packets
   Individual User Traits

6. New York
   promising practices file

7. Ohio
   State law file

8. Pennsylvania — RISE (Research Information Services for Education, King of Prussia, PA)
   LAP Collection

9. Wisconsin
   WISE — Wisconsin Information Services for Education
   Computer Conferencing Capability

III. Issues and Concerns

1. Duplication of effort in file development/computerization
2. Quality control — how to screen out "junk"
3. Information overload/overkill
4. Accessibility to regional files/collections
5. Obligation for objectivity on part of all information services/centers
6. Quality control related to user types — a caution
7. Format of reporting — conducive to user/recipient?
8. Where is the place of user needs related to file develop/continuity/refinement?
9. User awareness — public relations
10. Is dissemination a FAD?
11. Costs are such that an effectiveness test will have to be run against dissemination
12. "Democratization" of information
13. Who should pay for information?
14. Refinement of systems for whose benefit?
15. Training for development of information retrievers
16. Document entry for user "match"
17. Non-accessibility to recent printed book, project, promising practices, journal articles, consultants
18. A matrix of data bases vs. types of materials
19. Abstracting practices with usage potential in mind
20. When to stop retrieving — what do you send — how much time should one spend fleshing/weeding out the meaningful from the chaff
21. The variable of differing levels of sophistication each user brings to an information source
22. Code of ethics/quality statements for information providers — what are good and/or effective search practices/strategies
23. Perpetual follow-through?
24. Whole issue of turn-around time

25. Evaluation and feedback (objectivity/subjectivity)
26. Reasonability/expectations of information sorters and providers
27. Transforming information
28. How to fund information services so that a quality service can be offered.
29. Are we too zealous?

IV. Recommendations

1. Feds undertake, or cause to be undertaken, the responsibility for all data files re: duplications, variations in format, further refinement of existing systems.

   OR

2. Work through existing networks and/or professional associations to the same end.

   FAILING 1 and 2 above,

3. Creators of regional files should offer up their "babes" for vendor consumption in order to increase accessibility.

4. There must be the development of information delivery standards and guides at the Federal level. The goal is for quality control re:

   - user input/needs
   - costs
   - guides to start-up
   - guides to refinement
   - guides to evaluating all phases of information systems (clearinghouses, vendors, brokers, user perceptions, utilization)

5. There should be training — not for casts of thousands — but regionally/locally for retrievers, brokers and users.

6. To assure greater "democratization" of information availability incentives should be provided to both current and new product developers to transform information at large into lay people's terms.

7. The Feds should provide technical and dollar assistance to SEAs to assess the monetary value of information delivery as currently exists in relation to its cost.

DATA BASES

ALTHOUGH THE LOCKHEED DIALOG SERVICE CONTAINS OVER 50 DATA BASES AVAILABLE FOR COMPUTER RETRIEVAL OF INFORMATION, THE FOLLOWING FILES HAVE BEEN FOUND TO BE MOST USEFUL FOR EDUCATIONAL AND OTHER SOCIAL SCIENCE QUERIES:

File 1
ERIC - the complete database on educational materials from the Educational Resources Center. It consists of two main files: Research in Education, which is concerned with identifying the most significant and timely education research reports and projects; and Current Index to Journals in Education, an index of more than 350 publications of interest to every segment of the educational profession.

File 4
EXCEPTIONAL CHILD EDUCATION ABSTRACTS - comprehensive database concerned with published and unpublished literature on the education of handicapped and gifted children. About one-fourth of the CEC citations are duplicated in ERIC and are available on microfiche. The remainder of the citations consist of books, journal articles, teaching materials and reports.

File 6
NTIS - consists of government-sponsored research, development, and engineering reports plus analyses prepared by federal agencies, including HEW.

File 7
SOCIAL SCIENCE CITATION INDEX - a multidisciplinary database indexing every significant item from the 1,000 most important social sciences journals throughout the world as well as important monographs. In addition to more conventional retrieval by title words or phrases, it is possible to search by way of the author's cited references.

File 9
AIM/ARM - specialized index for locating materials on vocational and technical education. Database covers documents on all aspects and subfields of vocational and technical education and the related areas of manpower economics and development, employment, job training and vocational guidance.

File 11
PSYCHOLOGICAL ABSTRACTS - covers the world's literature in psychology and related disciplines in the behavioral sciences. Over 900 periodicals and 1500 books, technical reports and monographs are included.

File 15
ABI/INFORM - covers an extremely wide field of subjects, representative of which are such topics as personnel, general management, finance, data processing, etc. It is the only database keyed especially to the crucial functional areas of management and administration and includes references from approximately 300 publications in business and related fields.

File 26
FOUNDATION DIRECTORY - provides descriptions of more than 2500 foundations which have assets of $1 million or more or which make grants of $500,000 or more annually. The foundations which qualify for inclusion account for nearly 90 percent of the assets of all foundations in the United States and 80 percent of all foundation giving.

File 27
FOUNDATION GRANTS INDEX - contains information on grants awarded by more than 400 major foundations. Information on grants given by foundations is useful in determinig types and amounts of grants awarded, since foundations seldom announce the availability of funds for specific purposes. Approximately 10,000 new grant records are added to the file each year.

File 35
COMPREHENSIVE DISSERTATION ABSTRACTS - a subject, title and author guide to every American dissertation accepted at an accredited institution since 1861. All subject areas are included and in the field of education there is a vast amount of information from the most obscure learning theory to the most practical problems of administration and policy.

File 37
SOCIOLOGICAL ABSTRACTS - covers the world's literature in sociology and related disciplines in the social and behavioral sciences. Over 1200 journals are scanned to provide coverage of original research, monographs, theory, etc.

File 38
AMERICA: HISTORY AND LIFE - includes approximately 40,000 records covering literature since 1955 on history, area studies, and current affairs for the U.S. and Canada.

File 39
HISTORICAL ABSTRACTS - includes approximately 16,000 records covering periodical literature since 1973 on world history (excluding U.S. and Canada).

NEW YORK TIMES DATA BANK (available to us through the State Library) - useful for access to pre-publication information about current practices, human resources, new trends in the field of education.

New files are added periodically and Center users will be advised as this occurs. All files listed above are computer accessible by the Center and represent, in combination, the storage of an estimated 750 million pages of information. For additional information call (toll free for Connecticut residents) 1 - 800 - 922-1567.

National and Regional Networks

Chairperson, Diane Lassman
The Exchange
University of Minnesota, Minneapolis

I. National Networks

Description	For more information:
Western States Consortium for Higher Education (WICHE)	Bob Trombly (participant in Networks group)
Teacher Corps	Bob Trombly (participant in Networks group)
National Association for Alternative Schools	Boston University
R&D Labs and Centers	CEDaR 1518 K Street, NW Suite 206 Washington, D.C. 20005
Teacher Centers	Teachers' Centers Exchange
Institute for Responsive Education (IRE)	IRE 704 Commonwealth Avenue Boston, Massachusetts 02215
IGE NEtwork (Individually Guided Education)	Kettering Foundation
ERIC Clearinghouses	
National Diffusion Network	Dissemination & Utilization Branch USOE
Women's Educational Equity Projects Communications Network	M. Follett (Networks Group Participant) Women's Program Staff, USOE
R&D Exchange	Ann Matthews Northwest Lab Portland, Oregon
Dissemination and Assessment Center for Bilingual Education (DACBE)	7703 No. Lamar Blvd. Austin, Texas 78752 and 385 High Street Fall River, Massachusetts 02720

I. National Networks, continued

Description	For more information:
Child Service Demonstration Centers (CSDCs) Title VI-G -- Model Learning Disabilities projects	National Learning Disabilities Assistance Project (NaLDAP) The NETWORK 3 Mechanics Street Merrimac, Massachusetts 01860
National Dissemination Leadership Group	NIE
NNCCVTE -- National Network for Curriculum Coordination in Vocational and Technical Education	Becky Douglass (Networks group participant)
NIMIS -- National Instructional Materials Information System/National Center on Educational Media and Materials for the Handicapped	Ohio State University College of Education
National Community Education Network (now forming)	M. Follett (Networks group participant) Women's Program Staff USOE
National Adult Education Network (now forming)	M. Follett Women's Program Staff USOE
Professional Associations -- CSSO NEA AESSA	
Experienced Based Career Education (Labs & Centers)	Far West Lab San Francisco, California
Area Learning Resource Centers; Regional Resource Centers (handicapped and special education)	BEH/USOE
North Dakota Study Group on Evaluation	Diane McIntyre Far West Labs San Francisco, California
ICOPE -- Alternative Schools (Indiana)	Diane Lassman The Exchange Minneapolis University of Minnesota

Description	For more information:
Education Commission of the States (Denver)	
RCU -- Research and Coordinating Unit	Becky Douglass (Networks group participant)
PBS -- Public Broadcasting System	

II. Regional Networks

ERIC Surveys of ERIC users and vendors	in Eric
R&D Exchange	Ann Matthews NW Lab Portland, Oregon
R&D Utilization Program (7 projects)	NIE Dissemination & Resources group
Professional Associations	

III. State and Sub-State Networks

State Library systems	
Capacity Building Projects	NIE
National Diffusion Network	USOE
Professional organizations	
State Educational Computer Consortia	

IV. Questions to Ask/Answer in Order to Generate a Descriptive Profile

1. Purpose -- consumers and audience
   services, products, or media
   nature of information flow (one way or both ways)
2. Funding -- Who funds or sponsors and how?
3. How long in existence?
4. Address, contact person
5. Governance -- what is nature of administrative control?
6. Scope -- number of members
   level of service

7. Other affiliations -- interface with other networks?

8. Access -- information, costs

9. Publications

10. Computer Capabilities

11. Products

V. Questions, Problems, Gaps and Concerns

Possible Solutions

1. Today's activity only uncovers the tip of the iceberg. We need to know more about what networks exist.
-Are there directories, data bases, etc. that list systems and organizations?
-We need definitions -- What is a network?

1. Gale Research could put together a directory. (Other possibilities include ERIC Information and Resources Clearinghouse and Library Associations.)

2. Access to resource bases/networks?

2-6
a) Funding from NIE -- i.e. upcoming RFP on networks
b) Standardization of costs for information services
c) Someone (existing now) should undertake the jobs of referral of information about educational resources such as a regional federal information center.

3. How to ask the right questions.

4. What are the types of networks? e.g., formal vs. informal; primarily informative or primarily people to people; long-term or short-term.

6. How do you network a variety of groups?

7. How do you network networks? How do they interface?

7. Conferences
Computer Conferences
Cross-agency newsletters

8. How to project the status of dissemination and information efforts in America to an international audience?

9. What problems are foreseen in terms of international linkages?

Sources of Educational Products and Practices

Chairperson, Dave Manis
CEMREL, St. Louis, Missouri

Description	Sources of Information
1. JDRP-approved projects ° Some are funded as developer-demonstrators projects ° Some are approved but not funded as demonstration projects ° Variety of content areas ° Available through National Diffusion Network (NDN) ° Developed with federal funds Title I, III, VII	A. Educational Programs that Work (catalog, 3rd edition 1976) Far West Laboratory 1855 Folsom Street San Francisco, California 94103 ($4.95, pre-paid) ($4.95 pre-paid) B. Contact State Facilitator, developer demonstrator, or State Department of Education. C. Contact: Dissemination and Utilization Branch USOE, Room 2031, FOB 6 400 Maryland Avenue, SW Washington, D.C. 20202
2. Products and Practices developed by R&D Labs and Centers	A. Catalog of NIE Education Products Vol. I -- $10. stock #017-080-02555-2 Vol. II -- $12. stock #017-080-01556-1 Superintendent of Documents U.S. Government Printing Office Washington, D.C. 20402 B. Resource units of NIE's R&D Exchange program Resource and Referral Service (RRS) Center for Vocational Education Ohio State University 1960 Kenny Road Columbus, Ohio 43210

Description	Sources of Information
3. State validated or exemplary products and practices (e.g. Title IV	A. State Department of Education in states which have validation procedures. Some of these are: Pennsylvania, Washington, New Jersey, Connecticut. B. In New York, contact EPSIS (State Information Center) C. States with Capacity Building programs/information centers: Pennsylvania, Washington, New Jersey, Connecticut.
4. EPIE Reports Analysis and review of Educational products and equipment -- primarily those which are commercially developed.	Educational Products Information Exchange (EPIE) EPIE Institute 463 West Street New York, New York 10014
5. Career Education products and programs	A. NIE Catalog (see #2 above) B. Education and work group National Institute of Education Washington, D.C. 20208
6. Information about Lab and Center activities and products	CEDaR Catalog -- (1974) Council for Educational Development and Research (CEDaR) 1518 K Street, NW Suite 206 Washington, D.C. 20005
7. Educational Dissemination and Linking Agent Sourcebook	Dr. Paul Hood Far West Laboratory 1855 Folsom Street San Francisco, California 94103 ($9.50, pre-paid. May, 1975 edition)
8. ASCD Curriculum Catalog	Association for Supervision and Curriculum Development (ASCD) 1701 K Street, NW Suite 1100 Washington, D.C. 20006

FINANCIAL RESOURCES

Chairperson, Jim Connett
LINK/KEDDS -- Wichita, Kansas

I. National Level

Source	Purpose	Example
U.S. Office of Management and Budget (OMB) Catalog of Federal Domestic Assistance ((CFDA) Government Printing Office (1976) $16.00	A 1040 page guide to all kinds of Federal funds available to states, communities, private groups, and individuals, classified by bureau function.	Every conceivable source for education
USOE -- Catalog of Federal Education Assistance Programs. Government Printing Office (1974) Stock #1708-01286	Includes all portions of the CFDA relevant to education (613 pages).	Every conceivable source for education
Commerce Business Daily available by subscription from the Government Printing office.	A daily list of U.S. government procurement invitations, contract awards, sub-contracting leads, etc.	Every conceivable source for education
Federal Register available by subscription from the Government Printing office.	Makes available to the public in a uniform format all regulations and legal notices issued by Federal agencies.	Every conceivable source for education
Education Daily available by subscription ($240.00/year) from Education News Services Division, Capital Publications Suite G-12, 2340 Pennsylvania Ave., NW Washington, D.C.	Daily newsletter about educational funding and legislation.	Every conceivable source for education
Annual Register of Grant Support, 1976-77. Chicago, Marquis Academic Media, 1976. 704 pp. $47.50	Index of grant-making ongoing organizations including government, business, professional associations and foundations.	
The Foundation Center Sourcebook, 75-76. Vol. I and II. Columbia University Press. $65.00/volume.	Profiles of 227 largest U.S. foundations with national or regional granting patterns.	

Description	Sources of Information
9. Bilingual education products and practices	A. National Resource Centers Dissemination and Assessment Center for Bilingual Education (DACBE) 7703 North Lamar Blvd. Austin, Texas 78752 National Assessment and Dissemination Center for Bilingual-Bicultural Education (NADC) 385 High Street Fall River, Massachusetts 02720 B. Regional Title VII Bilingual Resource Centers °110 Lexington St., Room 222 Brooklyn, New York 11201 °Summit Avenue School 86 Fourth Street Providence, Rhode Island 02906 °2168 Shattuck Avenue 2nd Floor Berkeley, California 94704 °San Diego State University 5544½ Hardy Avenue San Diego, California 92182 °500 S. Dwyer Avenue Arlington Heights, Illinois 60005 °University of Southwestern Lousiana P.O. Box 4-3410 USL Lafayette, Louisiana 70504
10. Practices and Products for Reading, English, Language Arts	A. National Council of Teachers of English (NCTE) Resources Catalog 1111 Kenyon Road Urbana, Illinois 61801 B. International Reading Association (IRA) Publications Catalog 800 Barksdale Road Newark, Delaware 19711

Description	Sources of Information
11. Exemplary, effective reading programs •12 Exemplary Reading programs packaged by American Institute for Research for Right to Read •222 Effective Reading Programs •Project Information Packages (PIPs)	A. National Diffusion Network for PIPs and other exemplary reading programs (see #1 above). B. NIE Catalog (see #2 above). C. State Right to Read Directors (for 12 exemplary programs). D. Catalog of 222 Effective Reading Programs available from National Council of Teachers of English (NCTE) (see #10 above).
12. Learning Activity Packages (LAPs) curriculum units	A. SMERC -- San Mateo Educational Resources Center 333 Main Street Redwood City, California 94063 B. RISE -- Research/Information Service for Education 1013 W. Ninth Avenue King of Prussia, Pennsylvania 1940[illegible] C. ACES -- Area Cooperative Educational Services 800 Dixwell Avenue New Haven, Connecticut 06002
13. Social Sciences curriculum information	Databook on Social Sciences Social Science Education Consortium 855 Broadway Boulder, Colorado 80302
14. Special Education •NDN projects •NIE products/programs •BEH-funded programs --Child Service Demonstration Centers (CSDCs) --Model Early Childhood Projects	A. National Diffusion Network (see #1 above) B. NIE catalog (see #2 above) C. Bureau of Education for the Handicapped (BEH) USOE -- BEH ROB-3 Room 3123 6th and D, SW Donahoe, Building Washington, D.C. 20202
15. International Catalog of Science Programs	University of Maryland
16. Inter. Consortium Catalog (Midwest States)	

Source	Purpose	Example
• Sierra Club	Environmental programs	
• Shriners Lions International	Special Education programs	

IV. Local Level

Source	Purpose	Example
• PTA		
• Professional organizations (NACTE, NASB, NEA)	• Provide limited discretionary funds to independent schools	
• School district budget	• Development of new programs	
• Title programs	• Development of new programs	Title IV-C , IX, VII
	• Support for information centers	
	• Initiation or study of change process	
	• Personnel	
	• Travel	
	• Dissemination of successful locally developed programs	
• Private foundations	• Development of new programs	• American Bar Association • Kettering Foundation • Periot Foundation • Calloway Foundation
• Community government agencies	• Dissemination of successful locally developed programs	• Social welfare agencies • Police (law enforcement agencies)

Source	Purpose	Example
The Foundation Directory, 5th edition. Columbia University Press, 1975, $30.00	Complete listings of 2,533 foundations which award grants of $550,000 or more annually.	
The Foundation Grants Index, 1975. Columbia University Press, 1976, $15.00	Lists grants of over $5,000 made to agencies and organizations by over 300 foundations.	
Russell Sage Foundations Directory	Topical and geographical indices.	
Gale Research Associates		

II. Regional Level

Source	Purpose	Example
• Legislative mandate	Planning and development in local districts	APCD -- Georgia
• SEA Division for R&D	Planning and development in local districts	
• State appropriations for intermediate units	• adoption of programs by local schools	• matching funds
• State supported inter-local agreements	• diffusion	• flow through
• Coop. SEA formula grants to locals	• dissemination	• discretionary fund
	• adaptation	• gifted (TAG-Okla.)
		• Career Ed. (kansas)

III. Regional Level

Source	Purpose	Example
• HEW Regional Offices		
• Ozarkia		
• Federally funded technical assistance groups or centers		
• WICHE Foundation (Western interstate Commission for Higher Education		

HUMAN RESOURCES

Chairperson, George Grimes
Project VALUE
Wayne, Michigan

I. Examples and Impact Audiences*

Human Resources	Professional	Student
Student Teachers	(x)	x
Project Directors	x	(x)
Visiting Artists	(x)	x
Faculty Members	x	x
Volunteers and Tutors		x
Paraprofessionals		x
Community Special Interest Resources		x
Librarians (public)	x	x
Institutional Resources		
Federal Agencies (NIE, OSOE)	x	
Professional Associations	x	
D/D Projects	x	(x)
Universities	x	(x)
Industry	x	x
State Agencies	x	(x)
Local Agencies		
- Local Districts	(x)	x
- Regional Service Agencies	x	(x)
Consulting Firms	x	
External Professional Associations	x	x
Social and Legal Agencies	x	x
Clearinghouses and Regional Labs	x	(x)

II. Issues/Problems - Human Resources

- Input control. Should it be inclusive or exclusive? What type of "quality" control should be exercised (or should it)?
- Identification. Should resources be nominated by individuals or organizations? By both? How should identification be done?
- Currency. How can the bank be kept current. How can "garbaging up" be avoided?

(Issues/Problems - Human Resources)

- File depth and breadth. Should the file be local? regional? state? national? What is the cost effectiveness of a national bank for local use?

- Privacy. How can privacy be assured? What are the moral, ethical, legal, and credibility questions involved? How can the bank be protected against misuse (as an employment agency, etc.)?

III. Recommendations - Human Resources

- Sufficient descriptive information should be provided about resources to allow an initial decision about use. References from previous users should be included in this information.

- Identification of resources should be through multiple sources. Organizations and agencies (state department of education, professional associations, accreditation agencies) or peer nomination are possibilities.

- Linkers are very important (who know the local situation) as an interface between needs and resources.

- Ongoing input on the effectiveness of resources must be built in. (It should be kept in mind that the effectiveness of a given resource varies according to the use circumstances.)

- Awareness procedures should be employed to create interest.

- The closer human resources are to the site of use, the more effective - given equal expertise.

- Access should be ongoing and live. An "on-line" or "dial-up" system is preferred to directories and other static forms of indexing.

- Multiple forms of access should be possible (personal, phone, print-out).

- ERIC descriptors should be used to describe resources so that other resource banks using ERIC terminology can also be accessed.

- Become institutionalized! Soft money comes and goes.

IV. Presently Available Access Systems

KEDS - Kansas Department of Education

National Learning Disabilities Assistance Project (NaLDAP) The NETWORK, Merrimac, Massachusetts

Arizona Cadre of Consultants - Arizona Department of Education

NEXUS - deals in the area of higher education (a model to look at)

APPENDIX

General Philosophical Statements

1. Do not depend on any single source of funding (cluster funding).
2. Be sure dissemination component is included in program budget and state plan.
3. Necessity for clinical work for people to approach funding sources (effective grantsmanship).
4. Be involved in creative process before money comes -- a clearly defined need is a requirement for financial resources. The greater the need and the area clearly identified, the greater probability it will be funded.
5. Problem identification is most essential in relation to potential funding.
6. Make linkages: Feed into White House Planning Conference on Library Science and Information Training priorities, scheduled for 1979.

Categories of Funding

General Resources

FEDERAL
- Dissemination -- Special
- Dissemination -- Related

REGIONAL e.g. -- Labs and Centers

STATE
- Dissemination -- Special
- Dissemination -- Related

INTERMEDIATE UNITS

LOCAL AGENCIES e.g. School Districts

Four Principles of Resource Utilization

Carolyn Trohoski
R.I.S.E.
King of Prussia, Pennsylvania

Principle #1

Users of information and adopters of programs don't really care where their information or program comes from as long as the outcome fits their need or solves their problem.

Principle #2

The number or range of resources within a state or regional agency is determined by economics and sometimes by political and legislative actions.

Principle #3

Incentives to use resources are generally lacking. Resources need to serve the WIFFM theory — "What's In It for Me?"

Principle #4

The purpose of the user defines the form of the resource(s) to be delivered.